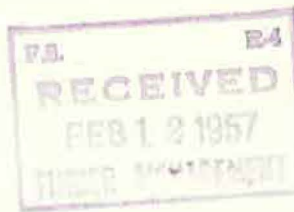


RX-INT
INSECT SURVEY PROGRAM
Reports
Aerial Survey



Not for Publication

For Action		For Initial
	General	
	Frykman	
	Moran	
	Grossenbach	
	Conrad	
	Lowe	
	TM Clark	

CHALLIS NATIONAL FOREST

Annual Aerial Survey

August 22, 24 and on September 1, 1956

by

W. E. Cole - W. E. Mineau^{1/}
Entomologists

An aerial survey of the Challis National Forest was conducted between August 22 to 24 and on September 1, 1956. The purpose of the examination was to detect, locate, and describe the evidence of unusual forest insect activity. Such an aerial survey also aids in planning ground coverage by revealing the danger spots.

The spruce budworm is the most prominent pest at this time. Three degrees of intensity of damage were used on the aerial work with budworm: light, medium, and heavy defoliation. This was based on current year defoliation. A ground appraisal survey covering the spruce budworm situation has been reported separately.

Bark beetle damage was also observed and recorded during the aerial survey. In the case of most bark beetles the aerial detection reveals only the damage of the previous year's attacks and not the now infestations. In some cases there may be fading of foliage during the season of attacks. Generally, ground work is required to determine the current status of bark beetle infestations.

It is planned to make yearly aerial examinations of the forest to observe the general conditions and possible dangerous situations in the early stages of development. Observations by Challis National Forest personnel during the year will also aid in improving our system of detection.

The attached map shows the flight lines followed during the aerial survey and the centers of infestation as mapped. A description of each area is keyed out on the map with brief statements on the insect species involved.

1/Forestry Aid - Research

2/Cole, W. E. 1956. Spruce Budworm in South Idaho with Special Reference to Surveys. Memo. IF&RES. F.S. Ogden, Utah

TM FILE COPY

Area A.

This area lies between the Middle Fork of the Salmon River and Little Soldier Mountain and between Rapid River and Little Loon Creek. There are approximately 22,250 acres of medium budworm defoliation within this area. This infestation is probably in its second year of existence.

Areas B, C, D, E, F, and G.

There are six areas of 1955 bark beetle damage within the Loon Creek drainage. However, each area is small, containing approximately 5 to 15 beetle-killed trees each. Areas D and G are areas of Douglas-fir bark beetle damage, while the remaining areas contain fir engraver damage in alpine fir.

Area H.

The heaviest concentration of fir engraver damage on the Challis N. F. is located in this area. Even so, only about 45 to 50 trees were located near the head of Beaver Creek which may be considered endemic.

Areas I, J, and K.

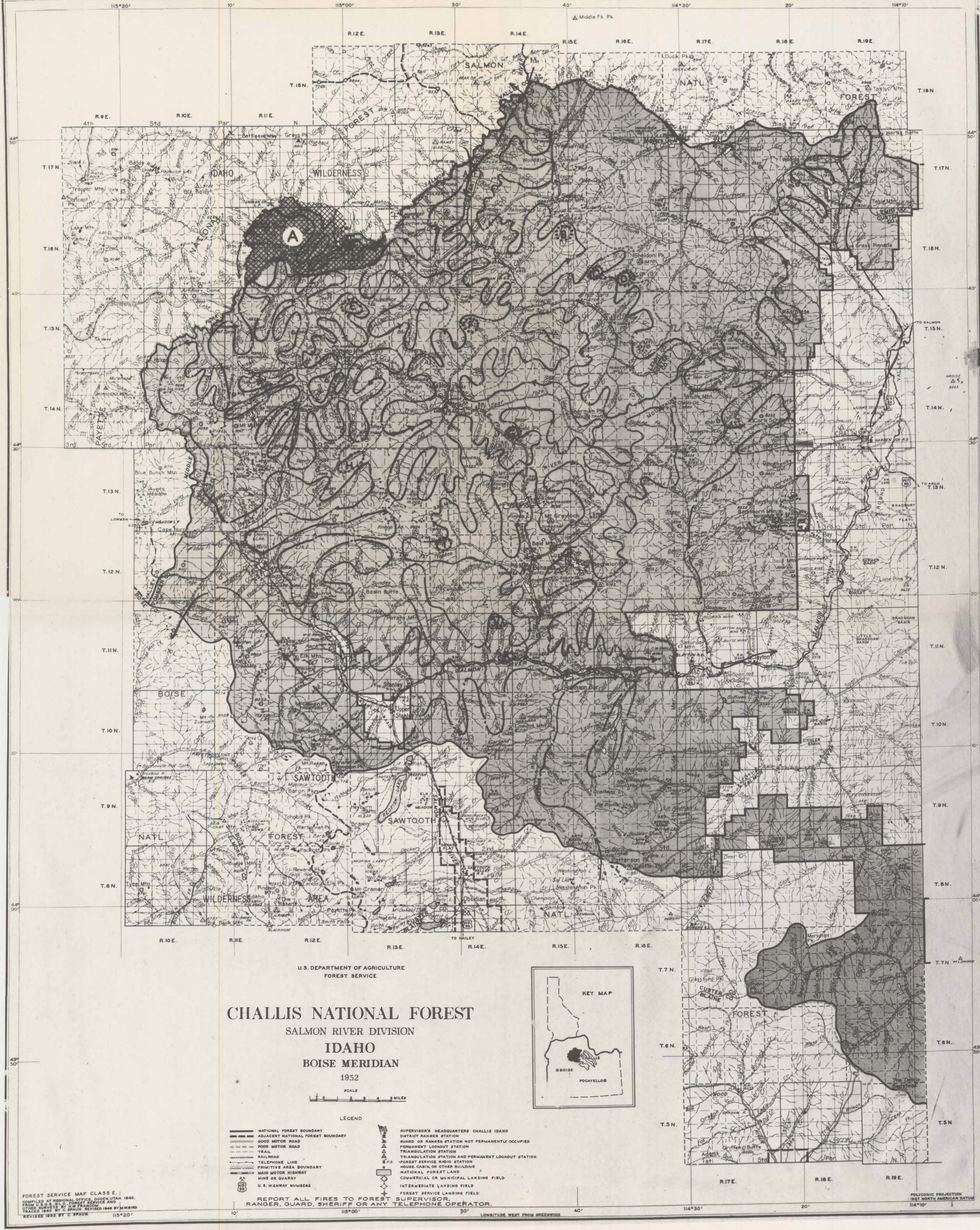
Areas I and J each contain about 10 to 15 alpine fir-killed trees and K about 5 to 10 Douglas-fir-killed trees.

SUMMARY

The spruce budworm has increased in 1956. This area borders some 87,000 acres in Indian Creek on the Boise National Forest.

The Douglas-fir bark beetle appears to be static for 1956 in its intensity of damage.

The alpine fir engraver beetle has increased slightly in activity over the 1955 damage.



U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

CHALLIS NATIONAL FOREST

SALMON RIVER DIVISION
IDAHO
BOISE MERIDIAN
1952

- LEGEND
- | | |
|-------------------------------------|-------------------------------------------------------|
| — NATIONAL FOREST BOUNDARY | ▲ SUPERVISOR'S HEADQUARTERS CHALLIS IDAHO |
| — ADJACENT NATIONAL FOREST BOUNDARY | △ DISTRICT RANGER STATION |
| — 6000 MOTOR ROAD | △ GUARD OR RANGER STATION NOT PERMANENTLY OCCUPIED |
| — POOR MOTOR ROAD | △ PERMANENT LOOKOUT STATION |
| — TRAIL | △ TRIANGULATION STATION AND PERMANENT LOOKOUT STATION |
| — RAILROAD | △ FOREST SERVICE RADIO STATION |
| — TELEPHONE LINE | △ HOUSE, CABIN, OR OTHER BUILDING |
| — PRIMITIVE AREA BOUNDARY | △ NATIONAL FOREST LAND |
| — MAIN MOTOR HIGHWAY | △ COMMERCIAL OR MUNICIPAL LANDING FIELD |
| — MINE OR QUARRY | △ INTERMEDIATE LANDING FIELD |
| — U.S. HIGHWAY NUMBERS | △ FOREST SERVICE LANDING FIELD |

FOREST SERVICE MAP CLASS E.
COMPILED AT REGIONAL OFFICE, OGDEN, UTAH, 1940.
FROM U.S. G.S. 2500, FOREST SERVICE AND
OTHER SURVEYS BY U.S. FOREST SERVICE.
TRAILED 1940 BY C. SPARK. REVISED 1948 BY M. BIRD.
REVISED 1952 BY C. SPARK.

REPORT ALL FIRES TO FOREST SUPERVISOR,
RANGER, GUARD, SHERIFF OR ANY TELEPHONE OPERATOR.



POLYCONIC PROJECTION
1987 NORTH AMERICAN DATUM
114°10'